

DELTA - 4B SERIES

**LIGHTNING SURGE PROTECTED
4 POSITION RF COAX SWITCH
WITH FIELD-REPLACEABLE SURGE PROTECTOR PILL**



ALPHA DELTA COMMUNICATIONS  **AA**
P.O. Box 620 • Manchester, Kentucky 40962 • (806) 598-2029 • FAX (806) 598-4413

**THE MODEL DELTA-4 SWITCH IS A PRECISION RF SWITCHING
DEVICE EMPLOYING THE LATEST HIGH TECHNOLOGY DESIGNS**

**NOTE: SAME DATA APPLIES FOR DELTA-2B
TWO POSITION SWITCH**

--SPECIFICATIONS--

POWER RATING- 1500 WATTS RF **IMPEDANCE-** 50 OHMS **CONNECTORS-** TYPE SO-239: DELTA-4
TYPE N: DELTA-4N

SWITCH POSITIONS Four, two either side of the "common" center, connector.

LIGHTING SURGE PROTECTION Alpha Delta Model D-4 internally mounted, field-replaceable ceramic gas tube Arc-Plug Cartridge Pill.

SPECIAL SWITCHING FUNCTIONS When the knob points to the center (ground) switch position, all antenna circuits are internally disconnected and grounded. When the knob is in an active position, the unused antenna ports are grounded. The active position circuit is continuously protected by the Model D-4 Arc-Plug Cartridge Pill.

GROUNDING REQUIREMENTS A separate, external ground wire must be used from one set of user supplied mounting hardware (through either thru-hole on the base plate) to the station ground system. (Not the equipment chassis.) The Arc-Plug Cartridge Pill will not operate without a good ground. Note: Paint should be removed at point of ground hardware connection to base plate. It is also good practice to ground the coax shield at point of entry to the building.

ELECTRICAL SPECIFICATIONS Nominal (S0-239 CONNECTORS)

	<u>VSWR</u>	<u>dB Loss</u>	<u>dB Isolation</u>
30 MHz	<1.1:1	.1dB	>60dB
150 MHz	<1.3:1	.15dB	>50dB
450 MHz	<1.4:1	.5dB	50dB

Model DELTA-4/N is rated through 1.3 GHz (loss < 0.5 dB typ thru 1.3 GHz)

PRICES & SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

These devices are not intended to protect equipment, personnel or structures from the effects of a direct lightning strike as these events are unpredictable in strength and vary widely in severity, possibly well above our surge handling specifications. However, these devices are designed to provide effective equipment protection from antenna induced atmospheric surge voltages resulting from electrical static voltage discharges and nearby lightning induced voltage discharges, within the ratings of these devices.

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ADDENDUM Sheet for Alpha Delta coax switch Instruction sheets.

Alpha Delta coax switches continue to evolve with significant manufacturing and design improvements! Introducing the **Alpha Delta "B"** series for models DELTA-2 and DELTA-4 coax switches.

- New precision machined switch shaft and quadrant rotating mechanism for more accurate and stable switching performance.
- Higher strength, lower resistance silver bearing solder.
- Increased housing durability and abrasion resistance with powder coat finish.
- New brass ARC-PLUG (tm) housing for improved gas tube positioning.
- Same low loss micro-strip cavity design, positive detent switching, master antenna ground function, front panel removable ARC-PLUG surge protection module and excellent HF thru UHF performance as in previous DELTA switches.
- Alpha Delta DELTA switches are used worldwide in government, military and commercial applications and are manufactured in our **ISO-9001** certified production facility in the U.S.A. We strive for excellence!
- See label on back switch panel for "B" series identification and other **important** information concerning user **cautions** and Model D-4 ARC-PLUG (tm) replacement notes.

DELTA-2B, 2 position, UHF connectors, thru 500 MHz

DELTA-2B/N, 2 position, N connectors, thru 1.2 GHz

DELTA-4B, 4 position, UHF connectors, thru 500 MHz

DELTA-4B/N, 4 position, N connectors, thru 1.2 GHz